

## **CLAIMS**

We claim:

1. A process for creating a filter for selecting documents, comprising:
  - identifying a plurality of profiles;
  - creating a sub-filter for each of said plurality of profiles, each of said sub-filters having an input and an output;
  - connecting each of said inputs at a single node; and
  - combining each of said outputs.
2. A process, as in claim 1, further comprising:
  - multiplexing said outputs of said sub-filters to create a first filter output.
3. A process, as in claim 2, further comprising:
  - combining said first filter output with at least one sub-filter output to create at least one second filter output.
4. A process, as in claim 3, further comprising:
  - aggregating said first filter output and said second filter output using a function.
5. A process, as in claim 4, wherein said function is a linear function.

6. A process, as in claim 4, wherein said function is a weighted function.
7. A process, as in claim 4, wherein said function is a thresholded aggregation function.
8. A process for creating a filter for selecting documents from a stream of documents, comprising:
  - identifying a plurality of sets of documents from said stream of documents;
  - identifying a plurality of profiles corresponding to said plurality of sets of documents;
  - creating a plurality of sub-filters using said plurality of profiles; and
  - combining a first one of said plurality of sub-filters with a second one of said plurality of sub-filters to create an ensemble filter.
9. A process, as in claim 8, wherein said plurality of sets of documents further comprises:
  - a set of documents for training;
  - a first coherent set of documents identified from said training set of documents;and
  - a remainder set of documents.
10. A process, as in claim 9, wherein said plurality of profiles further comprises:
  - a first profile corresponding to said first coherent set of documents; and
  - a remainder profile corresponding to said remainder set of documents.

11. A process, as in claim 10, wherein said plurality of sub-profiles further comprises:
  - a first sub-filter created using said first profile; and
  - a remainder sub-filter created using said remainder profile.
12. A process for creating a filter for selecting documents from a database of documents, comprising:
  - identifying a plurality of sets of documents from said database of documents;
  - identifying a plurality of profiles corresponding to said plurality of sets of documents;
  - creating a plurality of sub-filters using said plurality of profiles; and
  - combining a first one of said plurality of sub-filters with a second one of said plurality of sub-filters to create an ensemble filter.
13. A process, as in claim 12, wherein said plurality of sets of documents further comprises:
  - a set of documents for training;
  - a first coherent set of documents identified from said training set of documents;and
  - a remainder set of documents.
14. A process, as in claim 13, wherein said plurality of profiles further comprises:
  - a first profile corresponding to said first coherent set of documents; and
  - a remainder profile corresponding to said remainder set of documents.

15. A process, as in claim 14, wherein said plurality of sub-profiles further comprises:

a first sub-filter created using said first profile; and

a remainder sub-filter created using said remainder profile.